

§ 57.404 Measurements, records, and reports.

(a) *Measurements.* Each NSO shall require the smelter owner to install, operate, and maintain a measurement system(s) for continuously monitoring sulfur dioxide emissions and stack gas volumetric flow rates in each stack (except a stack used exclusively for bypassing control equipment) which could emit 5 percent or more of the smelter's total potential (uncontrolled) hourly sulfur dioxide emissions.

(1) Such monitors shall be installed, operated, and maintained in accordance with the performance specifications and other requirements contained in appendices D and E to 40 CFR part 52. The monitors must take and record at least one measurement of sulfur dioxide concentration and stack gas flow rate from the effluent of each affected stack in each fifteen-minute period. (The NSO shall require the smelter operator to devise and implement any procedures necessary for compliance with these performance specifications.)

(2) The sampling point shall be located at least eight stack diameters (diameter measured at sampling point) downstream and two diameters upstream from any flow disturbance such as a bend, expansion, constriction, or flame, unless another location is approved by the Administrator.

(3) The sampling point for monitoring emissions shall be in the duct at the centroid of the cross section if the cross sectional area is less than 4.645 m² (50 ft²) or at a point no closer to the wall than 0.914m (3 ft) if the cross sectional area is 4.645 m² (50 ft²) or more. The monitor sample point shall be in an area of small spatial concentration gradient and shall provide a sample which is representative of the concentration in the duct.

(4) The measurement system(s) installed and used pursuant to this paragraph shall be subject to the manufacturer's recommended zero adjustment and calibration procedures at least once per 24-hour operating period unless the manufacturer specifies or recommends calibration at shorter intervals, in which case such specifications or recommendations shall be followed. Records of these procedures shall be made which clearly show instrument

readings before and after zero adjustment and calibration.

(5) The results of such monitoring, calibration, and maintenance shall be submitted in the form and with the frequency specified in the NSO.

(b) *Records.* Each NSO shall require the smelter owner to maintain records of the air quality measurements made, meteorological information acquired, emission curtailment ordered (including the identity of the persons making such decisions), and calibration and maintenance performed on SCS monitors during the operation of the SCS. These records shall be maintained for the duration of the NSO.

(c) *Reports.* Each NSO shall require the smelter owner to:

(1) Submit a monthly summary indicating all places and times at which the NAAQS for SO₂ were violated in the smelter's DLA, and stating the SO₂ concentrations at such times;

(2) Immediately notify EPA and the State agency any time concentrations of SO₂ in the ambient air in the smelter's DLA reaches 0.3 part per million (800 micrograms/cubic meter), 24-hour average, or exceed the warning stage in any more stringent emergency plan in the applicable State Implementation Plan; and

(3) Make such other reports as may be specified in the NSO.

§ 57.405 Formulation, approval, and implementation of requirements.

(a) *SCS content of the application.* The requirements of § 57.203(d) shall be satisfied with respect to this subpart as follows:

(1) Each NSO application shall include a complete description of any supplementary control system in operation at the smelter at the time of application and a copy of any SCS operational manual in use with that system.

(2) Each NSO application shall contain proposed NSO provisions for compliance with the requirements of §§ 57.401, 57.402 (c), (d), and (f), 57.403, 57.404, and 57.405 (b)(2).

(3) Each NSO application shall include a specific plan for the development of a system fulfilling the requirements of § 57.402(a), (b), and (e) (covering air quality monitoring network,

meteorological network, and the SCS operational manual).

(b) *SCS content of the order.* (1) Each NSO shall include an approved version of the plan described in paragraph (a)(3) of this section and shall provide increments of progress towards its completion. Each NSO shall require, upon completion of the measures specified in the approved plan, submission of a report which describes each element of the SCS and explains why the elements satisfy the requirements of the plan and submission of a copy of the SCS operational manual developed under the plan.

(2) Each NSO shall require the submission of a final report, within 6 months of the required date for completion of the measures specified in the approved plan evaluating the performance and adequacy of the SCS developed pursuant to the approved plan. The report shall include:

(i) A detailed description of how the criteria that form the basis for particular curtailment decisions were derived;

(ii) A complete description of each SCS element listed in § 57.402 (a) through (d) (covering monitoring, meteorology, and the DLA), and an explanation of why the elements fulfill the requirements of those sections;

(iii) A reliability study demonstrating that the SCS will prevent violations of the NAAQS in the smelter's DLA at all times. The reliability study shall include a comprehensive analysis of the system's operation during one or more three-month seasonal periods when meteorological conditions creating the most serious risk of NAAQS violations are likely to occur. Where it is impossible, because of time restraints, to include in such a study and analysis of the three month seasonal period with meteorological conditions creating the most serious risk of NAAQS violations, the study shall analyze the system's operation on the basis of all available information. The NSO shall provide that in such case, a supplemental reliability study shall be submitted after the end of the worst case three-month period as a part of the next semi-annual report required under § 57.402(f).

(iv) A copy of the current SCS operational manual.

(c) *Amendment of the NSO.* Each NSO shall be amended, if necessary, within 3 months of completion of the measures required under the SCS development plan and also, if necessary, within three months of submission of the final report or any supplement to the final report required under paragraph (b)(2) of this section, to reflect the most current approved elements of the SCS and, as appropriate, to fulfill all other requirements of this subpart. Each NSO shall also be subsequently amended (as provided in § 57.104) whenever necessary as a result of the program required by § 57.402(f) or to reflect improved SCS operating procedures or other system requirements.

Subpart E—Fugitive Emission Evaluation and Control

§ 57.501 General requirements.

(a) Each NSO shall require the smelter owner to use such control measures as may be necessary to ensure that the smelter's fugitive emissions do not result in violations of the NAAQS for SO₂ in the smelter's DLA.

(b) A smelter which is operating under an NSO containing a SIP compliance schedule established in accordance with § 57.705 is required to be making progress toward compliance with any fugitive control requirements contained in its respective SIP and need not meet the other requirements contained in this subpart.

(c) A smelter which is subject to an NSO which does not contain a SIP compliance schedule must meet the provisions of §§ 57.502 and 57.503.

§ 57.502 Evaluation.

(a) *Evaluation at the time of application.* Any smelter owner may demonstrate at the time of application for an NSO that the smelter's SO₂ fugitive emissions will not cause or significant contribute to violations of the NAAQS in the smelter's DLA. If such demonstration is not made, the smelter owner shall submit the design and workplan for a study adequate to assess the sources of significant fugitive emissions from the smelter and their effects upon ambient air quality.